

**REMARKS**

**I. STATUS OF CLAIMS**

Claims 1-4, 8, 10, 15, and 18-20 have been amended.

Claims 5, 6, 12, 13, 16, and 17 have been canceled.

Claims 21 and 22 have been added.

Consequently, Claims 1-4, 7-11, 14-15, and 18-22 are pending in the application.

**II. SUBJECT MATTER NOT FOUND IN RABENKO'S PROVISIONAL**

**APPLICATIONS**

RABENKO's filing date, May 8, 2001, is after the filing date of the present application, June 30, 2000. Consequently, the priority dates of the two provisional applications referenced in RABENKO must be relied upon for the rejections using RABENKO as a reference.

Under 35 U.S.C. §102(e)(1), a published non-provisional application is effective as a reference as of its effective filing date only for the subject matter supported by its priority documents. However, a provisional application relied upon for priority is not itself a valid reference under 35 U.S.C. §102(e)(1), because provisional applications are not "published under 35 U.S.C. §122(b)" as required by 35 U.S.C. §102(e)(1). Thus, a provisional application is not effective as a reference as of its filing date. In contrast, a provisional application becomes a reference only as of the date that it becomes public (if it does become public).

The provisional applications on which RABENKO relies for priority became public on January 17, 2002, as a result of the publication of the RABENKO non-provisional application. However, January 17, 2002 is later than the filing date of the present application. Thus, RABENKO is a reference only for subject matter supported by both the published non-

provisional application and its priority documents. The prior Office Actions, however, have not demonstrated that the content relied upon for the rejections using RABENKO as a reference is in fact supported by either provisional application, and have not demonstrated that the content relied upon can be found in the same provisional application. Applicant contends that there is no such support, and the office has the burden to prove support.

Thus, the Final Office Action may not reject a claim of Applicant's application based upon subject matter that is supported only by the RABENKO non-provisional application alone, or only by one of the two provisional applications on which the RABENKO non-provisional application relies for priority. Accordingly, RABENKO should be withdrawn as a reference.

### **III. THE CLAIMS ARE ALLOWABLE OVER THE CITED REFERENCES**

#### **A. ANTICIPATION REJECTION OF CLAIMS 1-2, 4-9, AND 11-19**

Claims 1-2, 4-9, and 11-19 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by RABENKO, which is a published non-provisional patent application. The rejection is respectfully traversed.

As amended, Claims 1, 8, 15, and 18 recite,

setting a field in a frame header of the voice packets associated with digitized voice and digitized voiceband indicating that the voice packets are to be transmitted at a highest level of priority...; and  
transmitting said voice packets over the local area network...that supports levels of transmission priority for transmitting data, wherein the voice packets associated with the digitized voice and digitized voiceband are transmitted at the highest level of priority as indicated by the setting of the field in the frame header.

Thus, the voiceband and digitized voice packets use the highest priority of the LAN. RABENKO fails to teach this feature. Additionally, RABENKO does not disclose setting the field in the frame of the packet to indicate the priority.

The Final Office Action contends that RABENKO shows “wherein voice packet has a high priority than the data packet for transmitting via HPNA ...; See Pages 2, Sec 32 to Page 3, Sec 47; See Pages 6-7, Sec 74, 77, 78, 80-88; Page 11, sec 120, Page 15, sec143, 152; Page 16, Sec 160-165, Page 21-26, Sec 216-267.” However, based on a careful reading, none of the passages cited above discuss giving the highest priority to the transmission of the digitized voice and voice band packets. Thus, the argument of the Final Office Action is not supported in RABENKO. Reconsideration is respectfully requested.

As amended, Claims 1, 8, 15, and 18 recite:

wherein said voice packets conform to a set of protocols that excludes Internet Protocol (IP);...  
and  
transmitting said voice packets over at the local area network without a separate voice dedicated network and without a logically separate voice network ....

The Final Office Action (at the paragraph bridging pages 2 and 3) contends that “Rabenko discloses ... wherein the IP excludes from LAN; See Pages 2, Sec 32 to Page 3, Sec 47; See Pages 6-7, Sec 74, 77, 78, 80-88; Page 11, sec 120, Page 15, sec143, 152; Page 16, Sec 160-165, Page 21-26, Sec 216-267.” Applicants disagree. Many of these passages suggest translating VoIP packets of a WAN to a VoHN format associated with a LAN. However, none of the numerous cited passages recite excluding IP packets from the LAN. Additionally, RABENKO states:

[0051] In addition, the described exemplary embodiment can support multiple inputs in accordance with *a variety of protocols*. For example, a universal serial bus transceiver 204 can provide transparent bi-directional IP traffic between devices operating on a USB such as for example a PC (personal computer) workstation, server printer or other similar devices (not shown). Additionally, an IEEE 802.3 compliant media independent interface (MII) 210 in conjunction with an Ethernet MAC 211 can also provide bi-directional data exchange between devices such as, for example a number of PCs and/or Ethernet phones (not shown). (Emphasis added.)

Thus, packets on RABENKO's network are IP protocol packets, and may be carried in a logically separate network. In contrast, the Applicants' Overview teaches not to use a logically separate network, and this feature is reflected in the amended claims. Applicants' background section, at page 6, describes the disadvantages of using voice over IP, which requires the RTP protocol. In contrast, at paragraph [0101] RABENKO states that RTP is required. Because RTP is always used over IP, RABENKO necessarily includes IP, in contrast to Claims 1, 8, 15 and 18 which explicitly exclude IP.

RABENKO may provide that some traffic can have its format converted, but RABENKO explicitly states (in paragraph [0051]) that their network "can provide transparent *bi-directional IP traffic* between devices". Consequently, in contrast to Claim 1, RABENKO does not exclude IP packets or a logically separate network.

Accordingly, Claims 1, 8, 15, and 18 each recite at least one feature that is not found in RABENKO. Therefore, a rejection for anticipation under 35 U.S.C. §102 is not supported in the references of record. Reconsideration and withdrawal of the rejection of Claims 1, 8, 15, and 18 are respectfully requested.

Claims 8 and 15 further recite "a Subscriber Line Interface Circuit (SLIC) configured to receive analog phone signaling and generate digitized phone signaling." Addressing this feature, the Final Office Action states (at page 2), "Rabenko discloses SLIC for receiving a DTMF signal and digitizing the DTMF signal before input into a packetizing engine for generating a DTMF packet for transmitting via local area network which uses HPNA protocol as claims 8 and 15 (See sec 162, 164-165, 259 (See Fig 16 of 137, figs 6, 39, 44-47, 057, Figs 6, 39, 44-47))."

However, paragraphs [0162], [0164], and [0165] discuss portions of FIG. 7. FIG. 7 is related to the phone 108 (on line 106a), as indicated by the references to phone 108 in paragraphs [0154],

[0155], [0162], and [0163], for example. Phone 108 is an ordinary POTS telephone using line 106a, which is not a network and does not use HPNA protocol. Thus, SLIC 109 is not part of a “network device”.

Additionally, paragraphs [0162], [0164], [0165], [0259] never mention a SLIC. In contrast, claims 8 and 15 recite a “network device...comprising... a Subscriber Line Interface Circuit (SLIC)”.

Claims 2, 4, 7, 9, 11, 14, and 19 each depend, directly or indirectly, on an independent claim that is discussed above. Because each of the dependant claims includes the limitations of claims upon which they depend, the dependant claims are patentable for at least those reasons the claims upon which the dependant claims depend are patentable. Removal of the rejections with respect to the dependant claims and allowance of the dependant claims is respectfully requested. In addition, the dependent claims introduce additional limitations that independently render them patentable. Due to the fundamental difference already identified, a separate discussion of those limitations is not included at this time.

B. OBVIOUSNESS REJECTION OF DEPENDENT CLAIMS 3, 10, AND 20

Claims 3, 10, 20 were rejected under 35 U.S.C. § 103(a) based upon RABENKO in view of CZAJKOWSKI. Reconsideration is respectfully requested.

The Final Office Action states, “the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either *in the references themselves or in the knowledge generally available to one of ordinary skill in the art*. ... In this case, Rabenko suggests that ATM is used for transporting voice ... The motivation would have been to effectively enhance voice over ATM transport for any voice

rates by transporting the small packets, obtain a bandwidth efficient in the delay sensitive applications and multiplexing a plurality of voice channels... ." (Final Office Action, page 4).

The stated motivation, however, is not found in the references or any other source. Indeed, the references fail to recognize (1) that the AAL2 packets are small, (2) that the smallness of the AAL2 packets enhances ATM transport for any voice rates, and (3) that such transport would "obtain a bandwidth efficient in the delay sensitive applications and multiplexing a plurality of voice channels". Although CZAJKOWSKI discuss how to accommodate AAL2, if AAL2 should be used, CZAJKOWSKI does not give a reason why to use AAL2. The words "small" and "size", for example, do not appear in CZAJKOWSKI, and the Applicant is not aware of such teachings in CZAJKOWSKI.

The Final Office Action appears to rely on personal knowledge of the Examiner not found in the references. If so, Applicant requests citation of a supporting reference. 37 CFR §1.104 (d)(2).

Further even if the Final Office Action is correct that AAL2 is more efficient, the motivation of AAL2 as more efficient for carrying voice packets is not suggested in the prior art cited by the Final Office Action. The prior art must suggest the desirability of the claimed invention. MPEP § 2143.01, p. 2100-125; *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Thus, even if an alleged motivation is factually true, but is not taught, suggested, or otherwise recognized in the prior art, then the stated motivation is insufficient.

The Final Office Action further contends, in response to Applicant's prior argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, "***so long as it takes into account only knowledge which was within the level of ordinary skill*** at the time

the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper.” (Emphasis added.) However, the alleged motivation in the Final Office Action takes into account unsupported assertions regarding alleged advantages in the smallness and bandwidth of AAL2 that have not been demonstrated to be “*only knowledge which was within the level of ordinary skill*”. Consequently, following the criteria in the Final Office Action, the alleged motivation is hindsight.

Because the Final Office Action has not proffered any proof for the alleged motivation to combine RABENKO and CZAJKOWSKI, the Office Action has not established a prima facie case of obviousness as required under 35 U.S.C. § 103(a). Therefore, the rejection should be withdrawn.

C. OBVIOUSNESS REJECTION OF CLAIMS 1-20

Claims 1-20 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over EDSON in view of WALLACE.

1. INDEPENDENT CLAIMS 1, 8, 15, AND 18

EDSON and WALLACE do not disclose using the highest priority for digitized voiceband and digitized voice, and do not disclose indicating the priority by setting a field in the header frame of the digitized voiceband and digitized voice packets, as now recited in each of the independent Claims 1, 8, 15, and 18.

The Final Office Action (at page 5) relies on the same motivation articulated above, “to obtain a bandwidth efficient in the delay sensitive applications” and the “small size” of AAL2 packets, as a rationale for combining EDSON and WALLACE. However, the Office Action fails to explain how WALLACE or EDSON recognize (1) that the AAL2 packets are small, (2) that the smallness of the AAL2 packets enhances ATM transport for any voice rates, and (3) that

such transport would “obtain a bandwidth efficient in the delay sensitive applications and multiplexing a plurality of voice channels”. Although WALLACE discusses how to accommodate AAL2, if AAL2 should be used, WALLACE does not state why to use AAL2. For example, the words “small” and “size” do not appear in WALLACE, and the Applicants are not aware of such teachings in WALLACE.

Additionally, even if EDSON uses AAL2 packets, EDSON and WALLACE fail to teach use of a protocol excluding IP packets without using a logically separate network on the LAN of EDSON. In fact, EDSON teaches away from Applicant’s claims, by explicitly requiring IP, as stated at column 8, lines 22-28 (“In accord with one aspect of the invention, this processing also entails digital compression decompression, packet assembly/disassembly and appropriate signaling to enable *Internet Protocol (IP) transport* of the telephone communication signals, for example *through the gateway 13* and one of the high-speed links to the public Internet ...”; [emphasis added]). Thus, in contrast to claims 1, 8, 15, and 18, EDSON disclose carrying IP packets through gateway 13 onto line 21, and do not exclude IP packets from the LAN.

The Final Office Action’s position is also incorrect because AAL2 is not normally efficient in its power usage of ATM cells. For example, WALLACE (at column 7, lines 32-53) teaches that AAL2 ATM voice transport does not inherently achieve lower power consumption, but that a special “profile” must be used for the AAL2 ATM during low power operations.

Further, the low power operations of WALLACE are not normally used. Instead, WALLACE (at column 7, lines 26-31) states that “[o]n *detection of loss of power to the customer premises equipment ..., the CPE switches Into(sic) a low-power mode*, so that it operates from power which is supplied by DC feed down the subscriber line alone, without the



need for support from any other external power source.” One reason low power operations are not normally used is because they may even “involve dropping some calls in progress”.

Thus, WALLACE is willing to tolerate inferior operations (such as those of the special “profile” for the AAL2) during emergency low power operations. If the special profile required for AAL2 ATM was desirable, it would be used all the time, and not just during low power operations. While WALLACE may teach a workaround for using AAL2, WALLACE does not suggest usage of AAL2, and even suggests that normal AAL2 profiles are not efficient; therefore, WALLACE *teaches away* from using AAL2. For this reason, one of ordinary skill in the art would not think to modify EDSON based on WALLACE.

Claim 1 recites “converting analog phone signals into packets for transporting digitized voice”. Claims 8, 15, and 18 include similar recitations. However, WALLACE teaches that conventional VoDSL (and thereby imply that any other conventional digital signal) requires power during normal operations, and cannot be supported if there is a power failure at the customer premises. *See* WALLACE, column 1, lines 28-40. Although WALLACE provides a workaround for dealing with the power needs of VoDSL (or other digital signal) during a power outage at the customer cite, WALLACE admits that their workaround has disadvantages such as “calls may be dropped”, which is significant. Thus, one of ordinary skill in the art would have concluded from WALLACE that using analog signals for phones in the house is better so that phone service is still available during power outages and calls in progress do not need to be dropped using WALLACE’s workaround. In contrast, Claim 1 recites “converting analog phone signals into digital phone signals”, and EDSON includes a digital to analog converter 312 on analog phone 32. Thus, WALLACE teaches away from using the system of EDSON and from the invention of Claim 1.

Prior art must be considered in its entirety, including disclosures that teach away from the claims. MPEP § 2141.03, p. 2100-122; *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). The Final Office Action has not addressed these negative teachings of WALLACE, which Applicant identified in a reply to a prior Office Action. These negative teachings of WALLACE also teach away from modifying RABENKO to use AAL2.

Because of the negative teachings identified herein, the rationale of the Final Office Action is unsupported. Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 1, 8, 15, and 18 based on EDSON in view of WALLACE.

Claims 1, 8, 15, and 18 also differ from the cited references with respect to the number, nature and type of networks that are provided. EDSON illustrates a two-line system including line 23, having a computer 43, and line 21, having an analog phone 32. The manner in which EDSON proposes to “effectively provide all devices coupled to the internal media [with a means] to communicate via any of the external networks” is by “the routing function” of gateway 13 (column 8, lines 51-56). Hence, EDSON uses a routing function so that different devices are placed on different lines to be served by gateway 13; without the routing function, gateway 13 may not be able to accommodate the device on line 21 or line 23. Thus, EDSON intentionally separates the devices of line 23 (such as the computer 43) and line 21 (such as the phone 32). Consequently, EDSON provides a separate network for phones 32 and computer 43, in contrast to Claims 1, 8, 15, and 18.

Since the IP protocol intended for the computer and IP protocol intended for the phone are routed to different lines, there cannot be any motivation to provide the AAL2 protocol (as recited in claim 3) or “packets [that] conform to a set of protocols that excludes IP” (as recited in

independent Claims 1, 8, 15 and 18) to line 23 having computer 43, because computers often use IP for communicating.

Further, regarding line 21 and telephone 32, EDSON (at column 8, lines 18-28) states:

However, the D1/2 interface 312 also provides the necessary conversions between digital and analog and sends and receives data messages over the media 21 relating to the standard telephone line signaling used by the POTS telephone 32. ***In accord with one aspect of the invention, this processing also entails digital compression decompression, packet assembly/disassembly and appropriate signaling to enable Internet Protocol (IP) transport of the telephone communication signals, for example through the gateway 13 and one of the high-speed links to the public Internet. (Emphasis added.)***

Thus, EDSON also teaches the use of IP on line 23 in conjunction with phone 32 and interface 312.

Consequently, to exclude IP as claimed is contrary to the teachings of EDSON. A *prima facie* case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the claimed invention. *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997). MPEP § 2145.03 (III), p. 2100-138.

EDSON at column 13, lines 29-34 further states,

The analog interface 55 switches between an analog mode and a digital mode. In the analog mode, the interface simply passes signals between the telephone 32 and an analog link 56. In the digital mode, however, the interface 55 emulates a POTS type analog telephone loop from an end office type telephone switching system.

Thus, EDSON's analog interface has an analog mode in which it merely passes analog signals.

Passing analog signals is a passive activity that does not require any power consumption.

Therefore, in the case of a power outage, one using EDSON's system merely switches to analog mode, without losing any calls or being inconvenienced with the special AAL2 packets that need to be used when WALLACE have a power outage. Consequently, one of ordinary skill in the art

would not modify the device of EDSON by using WALLACE's device, because WALLACE's device would unnecessarily degrade the phone reception during a power outage.

For all the foregoing reasons, the combination proposed by the Final Office Action is improper. Accordingly, the rejection of independent Claims 1, 8, 15, and 18 under 35 U.S.C. § 103(a) should be withdrawn. Reconsideration is respectfully requested.

## 2. DEPENDENT CLAIMS 2-4, 7, 9-11, 14, AND 18-20

Claims 2-4, 7, 9-11, 14, and 18-20 depend from one of independent Claims 1, 8, 15, and 18, and thus include each and every feature of the corresponding independent claims. Therefore, it is respectfully submitted that Claims 2-4, 7, 9-11, 14, and 18-20 are allowable for the reasons given above with respect to Claims 1, 8, 15, and 18. In addition, each of Claims 2-4, 7, 9-11, 14, and 18-20 introduces one or more additional limitations that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time. Therefore, it is respectfully submitted that Claims 2-4, 7, 9-11, 14, and 18-20 are allowable for the reasons given above with respect to Claims 1, 8, 15, and 18.

## D. NEW CLAIMS 21 AND 22

New dependent Claims 21 and 22 recite that the network includes telephones and computers on the same line. In contrast, EDSON places telephones and computers on different lines. For this reason, and for all the reasons given above with respect to the base claims from which Claims 21-22 depend, Claims 21-22 are allowable.

## III. CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any fee shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,  
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